

[0087]

SCALABLE NETWORK
GATEWAY PROCESSOR ARCHITECTURE

[0088]

Abstract of the Invention

[0089]

A network data processor system includes a plurality of data packet processors coupled through a data switch fabric between network connection processors. The data packet processors each include a data processing engine configured to perform a data processing function over data contained within predetermined data packets. The network connection processors include network interfaces coupleable to external data transmission networks and provide for the selective routing of said predetermined data packets through said data switch fabric to load balance the processing of the predetermined data packets by the plurality of data packet processors. A network control processor is provided to manage the other processors connected to the data switch fabric and to handle predetermined network connection processes. In the preferred embodiments of the present invention the data processing engine is preferably configured to perform hardware encryption and decryption algorithms called for by the IPsec protocol.